Center on Alcohol Marketing and Youth Georgetown University

Press reports ${ }^{1}$ and data from the Center on Alcohol Marketing and Youth (CAMY) indicate that alcohol companies are increasingly shifting their advertising from magazines to television, the Internet and other "new media." Looking at magazines and television from 2001 to 2006 reveals that youth ${ }^{2}$ exposure to alcohol advertising has indeed fallen in magazines, but this decline has been accompanied by an increase in youth exposure to alcohol advertising on television.

The Center on Alcohol Marketing and Youth asked Virtual Media Resources to analyze 19,466 alcohol advertisements placed in national magazines and 1,693,594 alcohol advertisements placed on cable and broadcast network television and local broadcast television from 2001 to 2006.

## Key Findings

- From 2001 to 2006, the number of alcohol advertisements in national magazines fell by $22 \%$ (from 3,616 to 2,831), while alcohol advertising spending in magazines peaked at $\$ 361$ million in 2004 but fell to $\$ 331$ million by 2006.
- Youth, young adult and adult exposure to alcohol advertising in national magazines fell by $50 \%, 33 \%$ and $28 \%$ respectively from 2001 to 2006.
- From 2001 to 2006, alcohol advertising spending on television increased by $27 \%$ (from $\$ 779$ million to $\$ 992$ million), while the number of advertisements on television grew by $33 \%$ (from 225,619 to 299,475).
- Youth, young adult and adult exposure to alcohol advertising on television increased by $30 \%, 25 \%$ and $29 \%$ respectively from 2001 to 2006.
- Compliance with the alcohol industry's voluntary $30 \%$ maximum for underage audiences of its advertising, a standard adopted in late 2003, has been good:
- In 2006, $3 \%$ of alcohol advertisements in national magazines ( 90 of 2,831 advertisements) were placed in magazines with youth audiences larger than $30 \%$.
- In 2006, 6\% of alcohol advertisements on television (18,220 of 299,475 advertisements) were placed on programming with underage audiences larger than $30 \%$.
- The $30 \%$ standard has produced slight progress in reducing youth exposure or overexposure to alcohol advertising:
- Overall, declines in youth exposure to alcohol advertising in magazines have been nearly offset by the increase in exposure coming from television advertising.
- On television, the percentage of youth exposure coming from alcohol advertising placed where youth are more likely to see it per capita than adults was virtually the same in 2006 as in 2001. ${ }^{3}$


## Alcohol and Youth

- Alcohol use is the number-one drug problem among youth. According to Monitoring the Future, the federal government's annual survey of drug use among eighth-, 10th-, and 12th-graders, more young people drink alcohol than smoke cigarettes or use illegal drugs. ${ }^{4}$
- Despite significant efforts to reduce youth access to alcohol, binge drinking among youth remains stubbornly high. In 2006,
7.2 million youth under age 21 reported binge drinking (i.e. consuming five or more drinks at a sitting, usually defined as within two hours) within the past month. ${ }^{5}$
- The earlier young people start drinking, the worse the consequences. People who start drinking before age 15 are five times more likely to suffer alcohol problems than those who wait to drink until they are $21,{ }^{6}$ while those who drink heavily in adolescence and early adulthood are more likely to develop a metabolic profile that puts them at greater risk of cardiovascular problems later in life, whether or not they continue drinking. ${ }^{7}$
- The U.S. Surgeon General estimates that approximately 5,000 persons under age 21 die from alcohol-related injuries involving underage drinking each year. ${ }^{8}$


## Alcohol Marketing and Youth

- Federally-funded long-term studies have found that likelihood of underage drinking was predicted by 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 or ownership of beer promotional items or branded merchandise. ${ }^{9}$
- 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 drank in the last month from $25 \%$ to between $24 \%$ and $21 \%$. The percentage who engage in binge drinking monthly would fall from $12 \%$ to between $11 \%$ and $8 \% .^{10}$


## The CAMY Television and Magazine Databases

- This report combines Nielsen ${ }^{11}$ television audience data with Nielsen Monitor-Plus television advertising occurrence data to analyze all television advertising for alcohol appearing on local and network broadcast television and network cable television from 2001 to 2006.
- This report does not include alcohol advertising placed on Spanish-language networks or on local cable interconnects. ${ }^{12}$
- This report analyzes all alcohol advertising placed in national magazines monitored by TNS Media Intelligence for which audience data were available from Mediamark Research \& Intelligence (MRI), formerly Mediamark Research Inc.
- The resulting magazine database encompasses advertising accounting for $79 \%$ of all spending on alcohol advertising in national magazines from 2001 to 2006 (see Appendix A for detailed methodology).


## Overview: Alcohol Advertising on Television and in Magazines, 2001 to 2006

- From 2001 to 2006, alcohol advertising spending on television grew by $27 \%$, while spending in magazines grew by only $3 \%$, which was less than the rate of inflation. ${ }^{13}$
- The most dramatic growth occurred in distilled spirits spending on television, which increased 20 -fold from 2001 to 2006.
- Spending on television advertising for wine and alcopops ${ }^{14}$ declined over the period, while beer and ale spending increased by 20\%.

Table 1: Alcohol Product Advertisements and Spending on Television by Beverage Type, 2001-2006

| Year | Beer and Ale |  | Distilled Spirits |  | Alcopops |  | Wine |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ads | Spending | Ads | Spending | Ads | Spending | Ads | Spending | Ads | Spending |
| 2001 | 177,410 | \$667,874,198 | 5,702 | \$7,152,201 | 17,988 | \$55,610,665 | 24,519 | \$48,475,190 | 225,619 | \$779,112,254 |
| 2002 | 214,942 | \$756,520,037 | 10,509 | \$16,105,965 | 39,577 | \$167,440,516 | 34,328 | \$57,119,092 | 299,356 | \$997,185,610 |
| 2003 | 231,875 | \$764,709,449 | 21,325 | \$35,055,194 | 19,997 | \$65,302,722 | 13,738 | \$25,769,462 | 286,935 | \$890,836,827 |
| 2004 | 215,383 | \$866,401,551 | 36,181 | \$68,973,040 | 11,577 | \$31,875,397 | 22,708 | \$19,980,626 | 285,849 | \$987,230,614 |
| 2005 | 215,520 | \$844,422,154 | 47,304 | \$120,821,569 | 20,480 | \$39,460,331 | 13,056 | \$25,236,748 | 296,360 | \$1,029,940,802 |
| 2006 | 215,312 | \$799,962,282 | 62,821 | \$142,425,694 | 10,113 | \$27,120,459 | 11,229 | \$22,667,375 | 299,475 | \$992,175,810 |
| Total | 1,270,442 | \$4,699,889,671 | 183,842 | \$390,533,663 | 119,732 | \$386,810,090 | 119,578 | \$199,248,493 | 1,693,594 | \$5,676,481,917 |
| Source: Nielsen Media Research, 2001-2006. |  |  |  |  |  |  |  |  |  |  |
| Note: | of rows and cold | mns may not mat | als due to | ding. |  |  |  |  |  |  |

Figure 1: Alcohol Product Advertising Spending on Television by Beverage Type, 2001 and 2006


Source: Nielsen Media Research, 2001-2006.

- Beer and ale spending increased in magazines as well, more than doubling between 2001 and 2006. Wine spending nearly doubled.
- The largest alcohol advertisers in magazines, distilled spirits marketers, decreased their spending by $19 \%$ over the six-year period.

Table 2: Alcohol Product Advertisements and Spending in National Magazines Measured by MRI, 2001-2006

| Year | Beer and Ale |  | Distilled Spirits |  | Alcopops |  | Wine |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ads | Spending | Ads | Spending | Ads | Spending | Ads | Spending | Ads | Spending |
| 2001 | 292 | \$30,524,944 | 2,840 | \$254,375,577 | 73 | \$6,944,474 | 411 | \$28,534,584 | 3,616 | \$320,379,579 |
| 2002 | 291 | \$33,991,692 | 2,697 | \$260,802,078 | 96 | \$10,294,433 | 514 | \$38,857,593 | 3,598 | \$343,945,795 |
| 2003 | 465 | \$54,893,009 | 2,330 | \$228,207,697 | 29 | \$3,009,913 | 417 | \$39,947,891 | 3,241 | \$326,058,509 |
| 2004 | 514 | \$64,674,633 | 2,224 | \$239,121,482 | 70 | \$10,468,580 | 475 | \$46,700,395 | 3,283 | \$360,965,090 |
| 2005 | 520 | \$71,752,209 | 1,910 | \$210,457,371 | 21 | \$1,881,440 | 446 | \$42,654,495 | 2,897 | \$326,745,515 |
| 2006 | 413 | \$67,522,115 | 1,825 | \$204,932,217 | 39 | \$4,370,967 | 554 | \$54,248,283 | 2,831 | \$331,073,582 |
| Total | 2,495 | \$323,358,601 | 13,826 | \$1,397,896,423 | 328 | \$36,969,806 | 2,817 | \$250,943,241 | 19,466 | \$2,009,168,070 |

[^0]Figure 2: Alcohol Product Advertising Spending in Magazines by Beverage Type, 2001 and 2006


Sources: TNS Media Intelligence, 2001-2006; Mediamark Research \& Intelligence, 2001-2007.
Note: Percentages may not add up to $100 \%$ due to rounding.

## Youth Exposure to Alcohol Advertising on Television and in Magazines

The result of these shifts in spending was an increase in youth exposure to alcohol advertising on television and a steady decline in youth exposure to alcohol advertising in magazines, causing an overall $6.1 \%$ drop in youth exposure to alcohol advertising across both media.

- In September 2003, the Distilled Spirits Council of the United States and the Beer Institute announced they would tighten their voluntary maximum for youth audience composition for advertising placements from $50 \%$ to $30 \%$, a standard the wine industry had adopted in 2000.
- As Figure 3 shows, the adoption of the standard may have contributed to a reduction in youth exposure (measured in gross rating points or GRPs) to alcohol advertising in magazines, but this progress has been counteracted by the increase in youth exposure to alcohol advertising on television.
- The average number of alcohol product ads seen on television by youth who were exposed to the advertising increased from 216 in 2001 to 285 in 2006, while the average number seen in magazines by youth fell from 171 to 89 over the same period (see Appendix C).

Figure 3: Trends in Youth Exposure to Alcohol Advertising in Magazines and on Television, 2001-2006


Sources: Nielsen Media Research, 2001-2006; TNS Media Intelligence, 2001-2006; Mediamark Research \& Intelligence, 2001-2007.

The increase in youth exposure is largely the result of more distilled spirits advertising, particularly on cable.

- Youth were exposed to 29 times more distilled spirits advertising on television in 2006 than in 2001.
- In contrast, the amount of beer and ale advertising seen by youth on television fell by $15 \%$ from 2001 to 2006.

Figure 4: Trends in Youth Exposure to Distilled Spirits Advertising and Beer and Ale Advertising on Television and in Magazines, 2001-2006

Trends in Youth Exposure to Distilled Spirits Advertising
Trends in Youth Exposure to Beer and Ale Advertising



[^1]
## Meeting the Industry's Voluntary 30\% Youth Audience Threshold

- Alcohol companies have made substantial progress in complying with the new $30 \%$ standard:
- In 2001, 382 (11\%) of 3,616 alcohol product advertisements in magazines were in publications with youth readerships greater than $30 \%$.
- In 2001, 24,825 (11\%) of 225,619 alcohol product advertisements were on television programming with youth audiences greater than $30 \%$.
- By 2006, only 90 (3\%) of 2,831 alcohol product advertisements in magazines were in publications with youth readerships greater than $30 \%$.
- By 2006, just 18,220 (6\%) of 299,475 alcohol product advertisements were on television programming with youth audiences greater than $30 \%$.

Figure 5: Percentages of Alcohol Product Advertisements With Youth Audiences Greater Than 30\%, 2001-2006


Sources: Nielsen Media Research, 2001-2006; TNS Media Intelligence, 2001-2006; Mediamark Research \& Intelligence, 2001-2007.

## Youth Overexposure to Alcohol Product Advertising on Television and in Magazines

Youth overexposure occurs when advertisements are placed on programming or in publications with youth audiences that are out of proportion to their presence in the general population. For magazines in 2006, this meant that youth were overexposed to advertisements when youth were more than $15.4 \%$ of the readership; for national television in 2006, youth were overexposed to advertisements when youth were more than $15.3 \%$ of the audience age 12 and above, i.e., when the GRPs for youth ages 12 to 20 exceeded the GRPs for adults age 21 and older. ${ }^{15}$

- As Figure 6 shows, the decline in placements with more than $30 \%$ youth audience composition has been accompanied by increases in youth exposure from overexposing placements on television and in magazines.
- The amount of youth exposure coming from placements that youth were more likely to see or view per capita than adults has changed only slightly since the adoption of the $30 \%$ threshold.
- On television, the percentage was $37 \%$ in 2001, and $36 \%$ in 2006.
- In magazines, the percentage was $89 \%$ in 2001, and $77 \%$ in 2006.

Figure 6: Percentage of Total Youth Exposure to Alcohol Product Advertising From Overexposure and From Placements Exceeding 30\%, 2001-2006



Sources: Nielsen Media Research, 2001-2006; TNS Media Intelligence, 2001-2006; Mediamark Research \& Intelligence, 2001-2007.

## The Role of Brands in Youth Overexposure

- In magazines in 2006, 21 alcohol brands (out of a total of 229 alcohol brands advertising in magazines) were responsible for $44 \%$ of youth exposure and $49 \%$ of youth overexposure, but only $33 \%$ of adult exposure to alcohol product advertising.
- On television in 2006, 22 alcohol brands (out of a total of 142 alcohol brands advertising on television) provided $36 \%$ of youth exposure and $48 \%$ of youth overexposure but only $30 \%$ of adult exposure to alcohol product advertising.
- Combining these two lists yields a list of 30 alcohol brands. Advertising placements for these brands resulted in $38 \%$ of youth exposure and $49 \%$ of youth overexposure to alcohol product advertising in magazines and on television. However, they resulted in only $30 \%$ of adult exposure.
- The combined list is comprised of 21 spirits brands, five beer brands, three alcopops brands, and one wine brand.

Table 3: Leading Alcohol Brands That Overexposed Youth in Magazines or on Television, 2006

| Brand | Total Ad Placements |  |  | Total Spending |  |  | Combined Gross Impressions (000) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Youth Ages 12-20 | Adults <br> Age 21+ |
|  |  |  |  | Total |  | Overexposing | \% Overexposing |
|  | Magazines | S TV | Combined |  |  |  |  | Magazines | TV | Combined |
| Corona Extra Beer | 6 | 24,592 | 24,598 | \$580,800 | \$26,072,350 | \$26,653,150 | 448,350 | 218,780 | 49\% | 3,468,246 |
| Bacardi Rums | 21 | 3,844 | 3,865 | \$2,803,539 | \$13,491,618 | \$16,295,157 | 376,226 | 178,564 | 47\% | 2,612,080 |
| Heineken Premium Lite Lager | 41 | 8,771 | 8,812 | \$7,979,746 | \$36,085,706 | \$44,065,452 | 350,137 | 172,245 | 49\% | 2,555,553 |
| Smirnoff Vodkas | 1 | 3,223 | 3,224 | \$38,250 | \$7,147,454 | \$7,185,704 | 253,768 | 117,576 | 46\% | 1,828,462 |
| Jack Daniel's Whiskey | 55 | 2,619 | 2,674 | \$8,477,476 | \$6,725,721 | \$15,203,197 | 248,496 | 157,056 | 63\% | 1,720,019 |
| Smirnoff Ice Malt Beverage | 2 | 3,025 | 3,027 | \$284,600 | \$10,957,947 | \$11,242,547 | 226,363 | 118,154 | 52\% | 1,494,215 |
| Jose Cuervo Black Medallion Tequila | 0 | 3,035 | 3,035 | \$0 | \$7,563,448 | \$7,563,448 | 219,006 | 118,354 | 54\% | 1,436,399 |
| Hennessy Cognacs | 1 | 3,957 | 3,958 | \$42,075 | \$7,204,265 | \$7,246,340 | 198,205 | 131,394 | 66\% | 1,095,063 |
| Belvedere Vodka | 0 | 1,748 | 1,748 | \$0 | \$3,341,943 | \$3,341,943 | 189,337 | 142,838 | 75\% | 890,639 |
| Absolut Vodka | 72 | 897 | 969 | \$10,796,295 | \$4,256,136 | \$15,052,431 | 176,370 | 113,853 | 65\% | 978,797 |
| Skyy Vodka | 45 | 0 | 45 | \$8,040,823 | \$0 | \$8,040,823 | 161,188 | 106,409 | 66\% | 671,254 |
| Southern Comfort | 13 | 1,687 | 1,700 | \$1,255,630 | \$7,197,631 | \$8,453,261 | 160,384 | 73,436 | 46\% | 1,079,790 |
| Miller Genuine Draft | 21 | 10,838 | 10,859 | \$4,826,641 | \$47,388,456 | \$52,215,097 | 155,041 | 73,250 | 47\% | 1,408,924 |
| Captain Morgan Rums | 0 | 1,871 | 1,871 | \$0 | \$6,487,892 | \$6,487,892 | 143,797 | 69,541 | 48\% | 1,016,787 |
| Captain Morgan Parrot Bay Tropical Malt Beverage | 0 | 2,574 | 2,574 | \$0 | \$6,376,388 | \$6,376,388 | 128,125 | 57,314 | 45\% | 924,940 |
| Ketel One Vodka | 194 | 0 | 194 | \$14,676,271 | \$0 | \$14,676,271 | 134,818 | 106,476 | 79\% | 974,483 |
| Red Stripe Jamaican Lager | 0 | 2,278 | 2,278 | \$0 | \$4,003,987 | \$4,003,987 | 115,652 | 52,545 | 45\% | 752,367 |
| Stolichnaya Stoli Blueberi Vodka | 0 | 1,186 | 1,186 | \$0 | \$3,474,225 | \$3,474,225 | 112,793 | 79,250 | 70\% | 569,757 |
| Miller High Life | 17 | 4,194 | 4,211 | \$2,562,052 | \$5,846,720 | \$8,408,772 | 105,556 | 53,916 | 51\% | 902,565 |
| Malibu Rum | 0 | 1,030 | 1,030 | \$0 | \$3,538,178 | \$3,538,178 | 99,543 | 64,085 | 64\% | 540,581 |
| Jose Cuervo Golden Margaritas | 51 | 0 | 51 | \$6,174,847 | \$0 | \$6,174,847 | 88,953 | 88,953 | 100\% | 397,618 |
| Patron Tequilas | 34 | 1,406 | 1,440 | \$3,832,296 | \$2,849,378 | \$6,681,674 | 86,706 | 60,621 | 70\% | 482,173 |
| Bacardi Limon Rum | 0 | 1,076 | 1,076 | \$0 | \$2,982,268 | \$2,982,268 | 80,227 | 47,515 | 59\% | 461,824 |
| Evan Williams Kentucky Straight Bourbon Whiskey | 34 | 0 | 34 | \$4,606,138 | \$0 | \$4,606,138 | 72,338 | 61,456 | 85\% | 343,994 |
| Crown Royal Whiskey | 20 | 907 | 927 | \$3,520,549 | \$1,473,404 | \$4,993,953 | 70,636 | 45,676 | 65\% | 445,902 |
| Patron Silver Tequila | 57 | 0 | 57 | \$7,786,252 | \$0 | \$7,786,252 | 69,091 | 54,780 | 79\% | 327,963 |
| Mike's Hard Mike-Arita Classic Lime | 0 | 1,847 | 1,847 | \$0 | \$3,749,047 | \$3,749,047 | 65,413 | 45,722 | 70\% | 389,826 |
| Yellow Tail Wines | 40 | 0 | 40 | \$5,026,935 | \$0 | \$5,026,935 | 65,103 | 57,662 | 89\% | 305,143 |
| Hennessy Very Special Cognac | 31 | 0 | 31 | \$2,903,571 | \$0 | \$2,903,571 | 61,808 | 58,388 | 94\% | 225,926 |
| Wild Turkey Bourbon Whiskey | 27 | 0 | 27 | \$3,420,976 | \$0 | \$3,420,976 | 59,815 | 59,815 | 100\% | 203,457 |
| Subtotal of Selected Brands | 783 | 86,605 | 87,388 | \$99,635,762 | \$218,214,162 | \$317,849,924 | 4,723,245 | 2,785,626 | 59\% | 30,504,746 |
| Remaining Brands | 2,048 21 | 212,870 | 214,918 | \$231,437,820 | \$773,961,648 | \$1,005,399,468 | 7,668,584 | 2,948,180 | 38\% | 70,148,513 |
| Total of All Brands | 2,831 299, | 299,475 | 302,306 | \$331,073,582 | \$992,175,810 | \$1,323,249,392 | 12,391,829 | 5,733,806 | 46\% | 100,653,260 |

Sources: Nielsen Media Research, 2006; TNS Media Intelligence, 2006; Mediamark Research \& Intelligence, 2006-2007.
Note: Sums of rows and columns may not match totals due to rounding.

## Alcohol Advertising Continues on Television Programs Most Popular With Teens

In its 1999 report to Congress on self-regulation in the alcohol industry, the Federal Trade Commission found that alcohol advertisers had placed their ads on "at least three" of the 15 programs drawing the largest audiences of teens ages 12 to $17 .{ }^{16}$

- In 2006, alcohol advertising was placed on 14 of the 15 programs with the largest teen audiences, for a total of 1,722 advertisements costing nearly $\$ 9$ million.
- The $30 \%$ threshold has had little discernable impact on a pattern of placements that has been consistent since CAMY began its monitoring: of the 15 most popular programs among teens, alcohol advertisements have appeared on 13 in 2001, on all 15 in 2003, and on 14 during every other year since 2002.

Table 4: Alcohol Advertising on the 15 Programs Most Popular With Teens, 2006

| Rank | Network | Program | 2006 Alcohol Advertisements |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Ads | Spending | Network/Spot |
| 1 | ABC | GREY'S ANATOMY | 315 | \$1,221,464 | Spot |
| 2 | ABC | DESPERATE HOUSEWIVES | 179 | \$714,651 | Spot |
| 3 | ABC | LOST | 410 | \$1,942,780 | Spot, Network |
| 4 | NBC | HEROES | 4 | \$14,706 | Spot |
| 5 | CBS | CSI | 256 | \$1,535,817 | Spot, Network |
| 6 | ABC | EXTREME MAKEOVER: HOME ED. | 153 | \$283,833 | Spot |
| 7 | CW | AMERICA'S NEXT TOP MODEL | 1 | \$653 | Spot |
| 8 | CBS | SURVIVOR: COOK ISLANDS | 13 | \$124,104 | Spot |
| 9 | CW | FRIDAY NIGHT SMACKDOWN | 2 | \$363 | Spot |
| 10 | ABC | DANCING WITH THE STARS | 4 | \$7,143 | Spot |
| 11 | NBC | DEAL OR NO DEAL | 141 | \$2,015,344 | Spot, Network |
| 12 | ABC | UGLY BETTY | 3 | \$3,468 | Spot |
| 13 | CBS | CSI: MIAMI | 231 | \$865,542 | Spot, Network |
| 14 | CW | GILMORE GIRLS | 0 | \$0 | N/A |
| 15 | CW | SMALLVILLE | 10 | \$41,345 | Spot |
| Total |  |  | 1,722 | \$8,771,213 |  |

[^2]
## Policy Implications and Conclusion

- Although alcohol industry compliance with the voluntary $30 \%$ maximum for youth audiences of alcohol advertising has been good, this threshold has led to only small progress in reducing youth exposure to alcohol advertising.
- Youth exposure to alcohol advertising in magazines has fallen, but this has been counteracted by the huge increase in distilled spirits product advertising on television, especially on cable television.
- Federally-funded surveys have found that binge-drinking 12th-grade girls (the only grade for which data are available) have shifted their beverage of choice from beer to liquor since 2001, ${ }^{17}$ and that in four states (the only places from which data are available), current drinkers in grades nine through 12 are also most likely to drink liquor. ${ }^{18}$
- Nearly half of youth overexposure to alcohol advertising on television and in magazines results from placements by a small number of brands, suggesting that the majority of the industry is able to advertise its products without overexposing youth.
- 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. ${ }^{19}$
- In recognition that 12 -to-20-year-olds (the group at greatest risk of underage drinking) are roughly $15 \%$ of the population, the National Research Council and the Institute of Medicine recommended in 2003 that alcohol companies immediately adopt a $25 \%$ threshold and move towards a $15 \%$ proportional threshold. ${ }^{20}$
- The Sober Truth On Preventing Underage Drinking Act (or "STOP Act"), passed unanimously by Congress and signed into law by President Bush in 2006, 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. ${ }^{21}$
- Ongoing, independent monitoring of youth exposure to alcohol advertising-with performance reported by brand-is necessary to encourage the alcohol 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.

## ACKNOWLEDGMENTS

The Center on Alcohol Marketing and Youth would like to thank the following researchers for their independent review of this report. The opinions expressed in this report are those of the authors and do not necessarily reflect those of the funders or reviewers.

Stu Gray, former Senior Vice President, Director of Media Resources, BBDO New York; and former Member of the Board of Directors, Advertising Research Foundation.

Joni Sims, media researcher and consultant; former Partner, Ogilvy \& Mather/Mindshare, and former Senior Client Executive, Nielsen Media Research.

Thomas Babor, Ph.D., M.P.H., Professor and Chairman, Department of Community Medicine and Health Care, University of Connecticut School of Medicine.

## APPENDIX A: Methodology

## 1. Television Sources

The television exposure analysis for this report was conducted using three principal resources:

- Nielsen Monitor-Plus provides date, time, source, program and expenditure data for each commercial occurrence.
- Nielsen Media Research provides demographic audience impressions and ratings that are associated with each ad occurrence. This information is provided (through Nielsen Monitor-Plus) as follows:

1) network programming is measured year-round; and
2) ratings for spot programming are assumed to be equivalent to the average ratings of "sweeps" months-typically in February, May, July and November-and any other measured months in the same quarter. The one exception is that September ratings are taken from the fourth quarter average rather than the summer months of the third quarter.

- Impact Databank, a market research firm serving the alcoholic beverage industry, provides industry-accepted classifications for all brands of alcoholic beverages.


## 2. Television Research Process

## A. Aggregation levels

A database of all television alcohol ad occurrences and relevant information was compiled. All data were aggregated and analyzed at the following levels:

- Media type (network, cable or spot)
- Network (NBC, FOX, ESPN, etc.)
- Program group (sports, sitcoms, etc., as defined by Nielsen Monitor-Plus)
- Daypart (time of day/week, using industry-accepted classifications)
- Impact Databank classification (beer and ale, distilled spirits, alcopops, wine)
- Brand (Coors Light, etc.)
- Parent company (Anheuser-Busch, etc.)


## B. Calculating composition, GRPs, impressions and overexposure

Youth audience composition for purposes of comparison to the industry's $30 \%$ standard was calculated using viewers ages 2 to 20 compared to a base of viewers age 2 and over as defined by Nielsen, allowing for the annual universe estimate adjustment in September of each year. Audiences for all programs and demographic breaks were calculated at the commercial occurrence level based on the most appropriate interval reported by Nielsen Monitor-Plus, typically the quarter-hour in which the occurrence was reported. National (broadcast and cable) gross rating points (GRPs) and impressions were combined with no adjustment, while spot TV GRPs were "nationalized" by summing the local market ad impressions and dividing the total by the national base.

Overexposure was calculated by comparing the ages-12-to-20 rating for each occurrence with the age-21-and-over rating. When the ages-12-to-20 rating is greater than the age-21+ rating, by definition the youth-ages-12-to-20 audience composition exceeds its proportion of the age-12-and-older population.

## Note on estimated audiences for spot advertisements

Nielsen Media Research does not field research studies in every television market during every month of the year. In markets where Nielsen has not fielded a study during a particular time period, the industry has accepted the practice of using audience estimates that are carried over from a comparable time period. Standard advertising industry practice is to purchase advertisements using such audience estimates. However, this only affects a small amount of alcohol advertising. For instance, in 2005, the alcohol industry purchased $\$ 42.3$ million of advertising during time periods for which audience composition was estimated from prior field studies. In this respect, the estimated audience numbers are substantive and meaningful to companies purchasing advertising. The relatively rare cases when audience numbers do not match what the advertiser intended to purchase are most likely to occur when programming is inserted into a timeslot that usually features a very different type of programming. For example, if a sports program is inserted into a weekday afternoon timeslot, then an audience estimate for programming that normally appears on a weekday afternoon may be applied to the sports program. These occurrences are very rare. In a CAMY analysis of 304,773 alcohol ads in $2005,1,273$ spot TV ads for alcohol appeared on sports programming in weekday daytime timeslots with an estimated audience. The impact of such ads on the results presented here is insignificant.

## C. Counting and qualifying ads

Product alcohol ads were included in this analysis if it was determined from their description that they were promoting products and were not general corporate advertisements, "responsibility" advertisements or other public service announcements. An alcohol ad was considered to overexpose youth when it was placed on a program where the percentage of underage youth in the audience was greater than the percentage of underage youth in the general population, that is, when the youth rating was higher than the adult-21+ rating for the time period and program in which the advertisement appeared.

## D. GRP calculations and estimated reach

GRPs for demographic groups were calculated by daypart, media type and network and program type and were used to estimate reach and frequency using the Nielsen 2001 Persons Cume Study with T*View from Stone House Systems, a widely used application for estimating audience reach and frequency.

## E. Top 15 television analysis

The 15 regularly scheduled television programs on commercial networks with the largest teen audiences were generated using Nielsen Media Research television ratings, the industry standard, for the second week of October each year, comparable to an analysis performed by the FTC in 1999. For these programs, all alcohol product advertising in primetime on network (cable or broadcast) television or local spot broadcast television that aired on the same network was identified for the entire year.

## 3. Magazine Sources

The magazine exposure analysis for this report was conducted using three principal resources:

- TNS Media Intelligence provides occurrence-specific information for each magazine advertising placement. See "Counting Magazine Advertisements" below.
- Mediamark Research \& Intelligence provides demographic audience impressions and ratings that are associated with each ad occurrence. See "Measuring Magazine Audiences" below.
- Impact Databank, a market research firm serving the alcoholic beverage industry, provides industry-accepted classifications for all brands of alcoholic beverages.


## 4. Counting Magazine Advertisements

Advertising occurrence data from TNS Media Intelligence (formerly CMR or Competitive Media Reporting) were used to identify brand advertising by publication and date. TNS Media Intelligence measures over 300 publications in addition to television and other media. TNS Media Intelligence and its predecessor companies have been an advertising-industry standard reference for decades.

For this report, only alcoholic beverage product advertising in national or full editions of publications, as measured by Mediamark Research \& Intelligence (MRI), formerly Mediamark Research Inc., was included. Non-product advertising was not included. MRI is the leading source of U.S. magazine audience estimates for consumer advertising. Advertising in demographic and regional editions of magazines was omitted since it is not practical to assign a national audience estimate to advertisements appearing in only a portion of a magazine's circulation.

Only those publications reported in MRI Teenmark, 2001; MRI TwelvePlus, 2001-2006; or the MRI Adult Studies, Spring 2002-Spring 2007, were included in the analysis. By restricting the analysis to product advertising in full-run editions of MRIreported audiences, the report tracks $81 \%$ of total reported magazine alcohol advertising expenditures in $2001,83 \%$ in $2002,82 \%$ in $2003,78 \%$ in $2004,76 \%$ in 2005 , and $76 \%$ in 2006.

Table 5: Disposition of Alcohol Advertising Expenditures in National Magazines, United States, 2001-2006

|  | All Alcohol Ads | National Editions Only |  | Product Ads Only |  | Reported by MRI |  | Non-National, Non-Product and Unreported Ads |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spending (000) | Spending (000) | \% of Spending | Spending (000) | \% of Spending | Spending (000) | \% of Spending | Spending (000) | \% of Spending |
| 2001 | \$396,588 | \$375,135 | 94.6\% | \$371,410 | 93.7\% | \$320,380 | 80.8\% | \$76,209 | 19.2\% |
| 2002 | \$413,458 | \$378,991 | 91.7\% | \$369,397 | 89.3\% | \$343,946 | 83.2\% | \$69,512 | 16.8\% |
| 2003 | \$399,871 | \$359,335 | 89.9\% | \$347,375 | 86.9\% | \$326,059 | 81.5\% | \$73,812 | 18.5\% |
| 2004 | \$460,959 | \$399,748 | 86.7\% | \$387,934 | 84.2\% | \$360,965 | 78.3\% | \$99,994 | 21.7\% |
| 2005 | \$429,253 | \$370,701 | 86.4\% | \$350,888 | 81.7\% | \$326,746 | 76.1\% | \$102,508 | 23.9\% |
| 2006 | \$436,841 | \$382,493 | 87.6\% | \$364,313 | 83.4\% | \$331,074 | 75.8\% | \$105,767 | 24.2\% |
| Total | \$2,536,970 | \$2,266,402 | 89.3\% | \$2,191,317 | 86.4\% | \$2,009,168 | 79.2\% | \$527,802 | 20.8\% |

Sources: TNS Media Intelligence, 2001-2006; Mediamark Research \& Intelligence, 2001-2007.
Note: Sums of rows and columns may not match totals due to rounding.

## 5. Measuring Magazine Audiences

## A. Sources of magazine audience data

MRI conducts ongoing studies of adults and teens to ascertain publication audience readership. These data are published either twice per year (for adults age 18 and older) or annually (for teens ages 12 to 17). Audience estimates from the following surveys were used for this report:

## 2001 advertising occurrences

- For persons age 18 and over: Adult Study, Spring 2002 (representing surveys from March 2001 through March 2002).
- For teens ages 12 to 17 : Teenmark and TwelvePlus, 2001 (representing surveys from the summers of 2000 and 2001). Teenmark was used only for Maxim, which was not reported in the 2001 TwelvePlus.


## 2002 advertising occurrences

- For persons age 18 and over: Adult Study, Spring 2003 (representing surveys from March 2002 through March 2003).
- For teens ages 12 to 17: TwelvePlus, 2002 (representing surveys from the summers of 2001 and 2002).


## 2003 advertising occurrences

- For persons age 18 and over: Adult Study, Spring 2004 (representing surveys from March 2003 through March 2004).
- For teens ages 12 to 17: TwelvePlus, 2003 (representing surveys from the summers of 2002 and 2003).


## 2004 advertising occurrences

- For persons age 18 and over: Adult Study, Spring 2005 (representing surveys from March 2004 through March 2005).
- For teens ages 12 to 17: TwelvePlus, 2004 (representing surveys from the summers of 2003 and 2004).


## 2005 advertising occurrences

- For persons age 18 and over: Adult Study, Spring 2006 (representing surveys from March 2005 through March 2006).
- For teens ages 12 to 17: TwelvePlus, 2005 (representing surveys from the summers of 2004 and 2005).


## 2006 advertising occurrences

- For persons age 18 and over: Adult Study, Spring 2007 (representing surveys from March 2006 through March 2007).
- For teens ages 12 to 17: TwelvePlus, 2006 (representing surveys from the summers of 2005 and 2006).


## Note on magazine readership methodology

While the Spring Adult Study, Teenmark and TwelvePlus all measure for ages 18 to 19, this report used the more widely accepted Spring Adult Study as the source for ages 18 to 19 .

MRI employs two methodologies for its magazine audience estimates. The adult survey methodology, which CAMY uses for persons age $18+$, employs a "recent reading" (RR) technique as part of a personal interview, which identifies readers in the average issue of each publication by asking those respondents who have read or looked into any issue of the publication in the last six months whether they have read or looked into any issue of the publication in the last week, two weeks, or 30 days, depending on the specific publication interval.

For readers ages 12 to 17 , MRI uses a household sample drawn from the adult survey, which employs a mailed questionnaire that includes a recent reading question and a "frequency of reading" (FOR) question for all measured publications. In the teen surveys, respondents indicate how many issues they have read (out of an average four). Teen audience estimates are based on the sum of weighted responses to the FOR questions. In effect, teen respondents who claim to read one out of four issues have a probability weight of approximately .25 , teens who claim to read two out of four issues have a weight of approximately .50 , etc. The weights are adjusted slightly based on the relationship between RR and FOR estimates in the MRI adult studies.

CAMY uses the MRI readership estimates for ages 12 to 17 from the teen studies and estimates for all readers age 18 and older from the Spring Adult Studies. The two surveys represent differing methodologies, a common feature of advertiser-supported media surveys, but they are also the most commonly accepted and used magazine audience surveys for their respective markets. MRI itself combines the results of these two methodologies in its TwelvePlus reports. In addition to differences in methodology, the adult surveys provide audience estimates for a more extensive roster of publications than do the teen surveys. Approximately 235 magazines are reported in the age-18+ surveys; roughly 50 publications have reported audiences for ages 12 to 17.

To assess the impact of the two different methodologies on estimating youth readership, Virtual Media Resources (VMR) used both methodologies to compare the ages-18-to-19 audience ratings for the 31 publications with alcohol advertising between 2001 and 2005 for which MRI provided audience data. For 26 of the 31 publications, the reported ages-18-to-19 ratings using the adult (RR) method were higher than those reported using the teen (FOR) method. The 10 publications with the highest reported alcohol advertising expenditures over the five-year period all had higher ages-18-to-19 readerships when VMR used the adult (RR) methodology than when VMR used the teen (FOR) methodology. Given the potential instability caused by examining such a small population segment, it is more reliable to average results for each publication over several years. Estimates for ages-18-to-19 readerships averaged $36 \%$ higher for the 10 publications with the highest reported alcohol advertising expenditures, and $25 \%$ greater for all 31 publications.

From this analysis, it is reasonable to conclude that the ratios of youth exposure versus adult exposure typically reported using MRI data are conservative. The likely effect of the different measurement methodologies is to understate the youth-ages-12-to-20 audience relative to adults, and thus a comparable readership methodology for all ages would very likely produce higher youth audience compositions and greater youth exposure relative to adults than are currently reported by MRI.

## B. Ad exposure measures

To calculate audience delivery, publication audience estimates were credited for discrete demographic cells for each publication issue in which a brand was advertised. Multiple insertions for a given brand within a single issue were credited only one time so as not to overstate audience exposure. No differentiation was made between advertisement types (size, color, etc.), since differential advertising impact measures based on advertising unit are not universally accepted.

## C. Calculating composition, GRPs, impressions and overexposure

Youth audience composition was calculated using readers ages 12 to 20 compared to a base of readers age 12 and over as defined by MRI, using the MRI surveys noted above. GRPs were calculated for all demographic groups using the formula of impressions as a percentage of population. Impressions were calculated using publication- and demographic-specific audience data from MRI surveys as noted above. Overexposure was calculated by comparing the ages-12-to-20 rating for each occurrence with the age- 21 -and-over rating. When the ages- 12 -to- 20 rating is greater than the age- $21+$ rating, by definition the youth-ages-12-to-20 audience composition exceeds the proportion of the age-12-and-older population.

## D. Reach calculations

Audience reach estimates were calculated using IMS (Interactive Market Systems) print media evaluation applications and the MRI Spring Adult Study, TwelvePlus and Teenmark. IMS is the leading provider of print media evaluation software for advertising.

## 6. Magazines and Advertisements Not Counted

Certain publications with significant alcohol advertising as tracked by TNS Media Intelligence are not currently measured by MRI and were therefore not included in this analysis.

Of the 153 magazines with alcohol advertising in 2001 that were monitored by TNS Media Intelligence, 98 had product advertising and were measured for media audiences by MRI. For 2002, there were 146 monitored magazines with alcohol advertising, of which 108 had product advertising in national editions that were measured by MRI; for 2003, there were 140 monitored magazines with alcohol advertising, of which 106 had product advertising in national editions that were measured by MRI; for 2004, there were 153 monitored publications with alcohol advertising, of which 114 had product advertising in national editions that were measured by MRI; for 2005, there were 157 monitored publications with alcohol advertising, of which 111 had product
advertising in national editions that were measured by MRI; for 2006, there were 149 monitored publications with alcohol advertising, of which 100 had product advertising in national editions that were measured by MRI.

The unmeasured publications and editions, as well as non-product advertising, represent $\$ 76.2, \$ 69.5, \$ 73.8, \$ 100.0, \$ 102.5$ and $\$ 105.8$ million in alcohol advertising in 2001, 2002, 2003, 2004, 2005 and 2006 respectively, or $19 \%, 17 \%, 18 \%, 22 \%, 24 \%$ and $24 \%$ of all alcohol advertising in magazines as reported by TNS Media Intelligence.

Audiences of youth ages 12 to 17 for many publications with substantial alcohol advertising are not measured by MRI; for these publications, data are only available for age 18 and older. Because this analysis is based only on published, industry-accepted survey data, we have not attempted to estimate the 12-to-17-year-old audiences for those publications, although all may be presumed to have at least some readership under the age of 18 .

An unknown amount is spent on many publications that were not monitored by TNS Media Intelligence or measured by MRI for all six years of advertising tracked in this report, such as Blender (advertising occurrence and age-18-and-over audience data reported as of 2005), XXL, Smooth, and King.

## 7. Combining TV and Magazine Exposure

Magazine and TV audience data were combined in this report based on national audiences and exposure estimates. Impressions and gross rating points were combined across the two media within a calendar year and for equivalent demographic groups.

## 8. 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 alcohol 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 Databank in recent years either as "low-alcohol refreshers" (2002) or as "ready-to-drink flavored alcoholic beverages" (2003, 2004 and 2005). ${ }^{22}$

## APPENDIX B: Glossary of Advertising Terms

## Rating

Audience as a percentage of a universe estimate.

## Universe Estimate

Total persons or homes in a given population (e.g., television households in the United States or persons ages 12 to 20 in the United States).

## Impressions

An advertising impression occurs when one person sees or hears an advertisement. If this ad is seen by five different people, that counts as five impressions. If a particular advertising medium, such as a magazine or television program, has an audience of 100,000 people, an ad placed in that magazine or 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 ad 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 see the same ad 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. For the example of a medium with an audience of 100,000 people, research may report that 20,000 are ages two to 20 , and 80,000 are age $21+$. 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 two to 20 and $80 \%$ age $21+$.

APPENDIX C: Television and Magazine Reach, Frequency and GRPs by Beverage Type, 2001-2006

Table 6: Reach, Frequency and GRPs of Alcohol Advertising on Television, 2001-2006
2001

|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 89\% | 181.5 | 16,215 | 94\% | 269.4 | 25,294 | 95\% | 257.5 | 24,527 | 96\% | 254.8 | 24,355 |
| Distilled Spirits | 58\% | 5.6 | 324 | 71\% | 6.7 | 473 | 72\% | 6.2 | 448 | 74\% | 5.8 | 429 |
| Alcopops | 85\% | 18.9 | 1,606 | 90\% | 25.9 | 2,332 | 92\% | 25.8 | 2,375 | 93\% | 25.2 | 2,329 |
| Wine | 85\% | 15.9 | 1,357 | 91\% | 28.5 | 2,586 | 93\% | 32.5 | 3,022 | 94\% | 40.3 | 3,807 |
| Total | 90\% | 216.5 | 19,502 | 94\% | 325.6 | 30,685 | 96\% | 317.8 | 30,372 | 96\% | 321.7 | 30,920 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 90\% | 198.4 | 17,820 | 94\% | 292.9 | 27,542 | 95\% | 281 | 26,798 | 96\% | 277.3 | 26,517 |
| Distilled Spirits | 67\% | 11.0 | 742 | 77\% | 14.0 | 1,077 | 80\% | 13.8 | 1,106 | 81\% | 13.3 | 1,082 |
| Alcopops | 88\% | 59.4 | 5,232 | 92\% | 85.4 | 7,899 | 94\% | 81.3 | 7,661 | 95\% | 76.9 | 7,282 |
| Wine | 84\% | 20.0 | 1,688 | 88\% | 35.2 | 3,111 | 91\% | 40.7 | 3,723 | 93\% | 51.9 | 4,826 |
| Total | 90\% | 282.6 | 25,482 | 94\% | 419.6 | 39,629 | 96\% | 410.3 | 39,289 | 96\% | 412.5 | 39,706 |

2003

| Beverage Type | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 90\% | 201.7 | 18,112 | 94\% | 299.9 | 28,211 | 96\% | 292.9 | 27,983 | 96\% | 287.0 | 27,504 |
| Distilled Spirits | 70\% | 34.3 | 2,398 | 77\% | 45.8 | 3,527 | 80\% | 43.8 | 3,492 | 81\% | 40.1 | 3,257 |
| Alcopops | 84\% | 25.6 | 2,146 | 89\% | 34.0 | 3,042 | 92\% | 31.6 | 2,900 | 92\% | 28.8 | 2,666 |
| Wine | 74\% | 9.8 | 726 | 83\% | 16.2 | 1,343 | 87\% | 18.8 | 1,627 | 90\% | 23.2 | 2,085 |
| Total | 90\% | 260.8 | 23,381 | 94\% | 383.3 | 36,122 | 96\% | 376.1 | 36,003 | 96\% | 396.7 | 35,512 |

2004

|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 90\% | 231.0 | 20,746 | 94\% | 355.6 | 33,429 | 95\% | 354.2 | 33,772 | 96\% | 351.0 | 33,601 |
| Distilled Spirits | 73\% | 67.2 | 4,884 | 79\% | 81.6 | 6,471 | 82\% | 76.9 | 6,320 | 84\% | 70.0 | 5,844 |
| Alcopops | 80\% | 16.6 | 1,332 | 86\% | 23.8 | 2,036 | 89\% | 22.4 | 1,984 | 89\% | 21.2 | 1,900 |
| Wine | 78\% | 10.8 | 840 | 84\% | 16.1 | 1,353 | 87\% | 17.6 | 1,542 | 89\% | 21.1 | 1,883 |
| Total | 90\% | 309.0 | 27,803 | 94\% | 459.4 | 43,290 | 95\% | 457.0 | 43,617 | 96\% | 450.7 | 43,228 |

2005

|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 89\% | 193.4 | 17,293 | 93\% | 307.8 | 28,773 | 95\% | 320.1 | 30,432 | 96\% | 330.0 | 31,559 |
| Distilled Spirits | 73\% | 104.1 | 7,641 | 79\% | 126.0 | 9,968 | 82\% | 122.2 | 10,017 | 84\% | 112.6 | 9,402 |
| Alcopops | 81\% | 19.1 | 1,543 | 86\% | 25.0 | 2,155 | 89\% | 24.2 | 2,150 | 90\% | 22.7 | 2,036 |
| Wine | 78\% | 12.2 | 947 | 84\% | 19.2 | 1,613 | 88\% | 22.6 | 1,975 | 89\% | 27.8 | 2,483 |
| Total | 89\% | 306.2 | 27,424 | 94\% | 452.2 | 42,510 | 95\% | 466.9 | 44,574 | 96\% | 474.2 | 45,479 |
| 2006 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 89\% | 154.3 | 13,731 | 93\% | 239.8 | 22,297 | 95\% | 247.8 | 23,544 | 96\% | 257.0 | 24,669 |
| Distilled Spirits | 77\% | 120.2 | 9,259 | 82\% | 154.3 | 12,651 | 85\% | 147.6 | 12,542 | 86\% | 134.1 | 11,530 |
| Alcopops | 75\% | 20.1 | 1,505 | 80\% | 24.8 | 1,981 | 84\% | 22.8 | 1,913 | 85\% | 19.0 | 1,614 |
| Wine | 78\% | 11.0 | 858 | 84\% | 17.5 | 1,474 | 88\% | 19.9 | 1,753 | 90\% | 24.5 | 2,205 |
| Total | 89\% | 284.9 | 25,353 | 93\% | 412.9 | 38,403 | 94\% | 422.9 | 39,752 | 95\% | 427.1 | 40,018 |

Source: Nielsen Media Research, 2001-2006.
Note: Sums of GRP columns may not match totals due to rounding.

Table 7: Reach, Frequency and GRPs of Alcohol Advertising in Magazines, 2001-2006
2001

|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 84.8\% | 22.1 | 1,870 | 76.3\% | 16.1 | 1,227 | 88.0\% | 23.4 | 2,064 | 71.0\% | 12.9 | 914 |
| Distilled Spirits | 93.4\% | 141.0 | 13,175 | 95.3\% | 104.0 | 9,916 | 98.0\% | 162.1 | 15,892 | 93.5\% | 82.1 | 7,680 |
| Alcopops | 60.6\% | 6.7 | 407 | 44.2\% | 5.6 | 250 | 66.1\% | 7.3 | 480 | 36.2\% | 4.5 | 164 |
| Wine | 56.6\% | 10.7 | 606 | 71.7\% | 19.0 | 1,359 | 75.8\% | 17.0 | 1,285 | 70.4\% | 19.7 | 1,386 |
| Total | 94.0\% | 170.8 | 16,057 | 96.2\% | 132.5 | 12,752 | 98.2\% | 200.7 | 19,720 | 94.8\% | 107.1 | 10,144 |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 81.1\% | 22.7 | 1,840 | 75.3\% | 15.6 | 1,171 | 88.6\% | 23.1 | 2,049 | 68.4\% | 12.3 | 842 |
| Distilled Spirits | 92.4\% | 122.6 | 11,324 | 95.8\% | 96.4 | 9,234 | 98.6\% | 150.2 | 14,809 | 93.6\% | 76.3 | 7,143 |
| Alcopops | 64.7\% | 10.3 | 668 | 47.1\% | 8.2 | 388 | 71.3\% | 11.0 | 787 | 35.5\% | 6.7 | 239 |
| Wine | 50.2\% | 10.8 | 544 | 73.0\% | 22.4 | 1,637 | 75.7\% | 21.2 | 1,604 | 71.1\% | 23.2 | 1,649 |
| Total | 93.3\% | 154.1 | 14,376 | 96.9\% | 128.2 | 12,430 | 99.1\% | 194.2 | 19,249 | 95.7\% | 103.2 | 9,873 |
| 2003 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 82.4\% | 29.4 | 2,425 | 81.4\% | 20.1 | 1,633 | 89.4\% | 32.2 | 2,881 | 77.1\% | 15.1 | 1,163 |
| Distilled Spirits | 91.4\% | 94.3 | 8,618 | 93.7\% | 76.8 | 7,194 | 97.0\% | 117.7 | 11,422 | 90.3\% | 62.0 | 5,601 |
| Alcopops | 50.3\% | 3.8 | 193 | 29.8\% | 3.4 | 101 | 51.0\% | 4.1 | 210 | 21.9\% | 2.7 | 60 |
| Wine | 43.2\% | 8.8 | 381 | 62.5\% | 18.1 | 1,134 | 65.6\% | 16.6 | 1,086 | 61.9\% | 18.6 | 1,152 |
| Total | 92.7\% | 125.3 | 11,616 | 95.6\% | 105.3 | 10,062 | 98.3\% | 158.7 | 15,598 | 93.6\% | 85.2 | 7,976 |
| 2004 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 84.7\% | 24.6 | 2,085 | 85.1\% | 21.3 | 1,812 | 93.6\% | 31.3 | 2,925 | 80.6\% | 17.3 | 1,396 |
| Distilled Spirits | 91.9\% | 86.2 | 7,921 | 94.5\% | 76.5 | 7,227 | 97.1\% | 108.0 | 10,488 | 92.7\% | 64.9 | 6,009 |
| Alcopops | 55.8\% | 7.9 | 443 | 50.4\% | 6.6 | 332 | 67.8\% | 8.0 | 545 | 45.4\% | 5.5 | 252 |
| Wine | 56.9\% | 10.2 | 578 | 71.1\% | 21.3 | 1,514 | 73.2\% | 17.9 | 1,311 | 69.7\% | 22.8 | 1,590 |
| Total | 93.5\% | 117.9 | 11,026 | 97.2\% | 112.0 | 10,885 | 98.5\% | 155.0 | 15,270 | 95.9\% | 96.4 | 9,247 |
| 2005 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| Beverage Type |  |  |  | Reach |  | GRPs | Reach |  | GRPs | Reach |  |  |
| Beer and Ale | $79.6 \%$ | $24.5$ | $1,948$ | 85.5\% | $21.4$ | $1,827$ | $93.1 \%$ | $32.0$ | $2,982$ | $80.1 \%$ | $17.5$ | $1,401$ |
| Distilled Spirits | 89.5\% | 62.2 | 5,570 | 94.3\% | 60.7 | 5,726 | 98.0\% | 88.7 | 8,693 | 92.4\% | 50.1 | 4,630 |
| Alcopops | 26.6\% | 2.3 | 62 | 23.6\% | 2.2 | 52 | 38.1\% | 2.5 | 97 | 18.1\% | 2.0 | 35 |
| Wine | 62.0\% | 10.0 | 621 | 77.6\% | 17.1 | 1,329 | 83.1\% | 16.2 | 1,349 | 75.2\% | 17.6 | 1,321 |
| Total | 91.3\% | 89.8 | 8,200 | 97.5\% | 91.7 | 8,934 | 98.9\% | 132.7 | 13,120 | 96.3\% | 76.7 | 7,387 |
| 2006 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Youth Ages 12-20 |  |  | Young Adults Ages 21-34 |  |  | Adults Ages 21-49 |  |  | Adults Age 21+ |  |  |
| Beverage Type | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs | Reach | Freq | GRPs |
| Beer and Ale | 75.1\% | 21.1 | 1,584 | 75.8\% | 17.4 | 1,321 | 87.2\% | 23.5 | 2,044 | 69.1\% | 15.3 | 1,056 |
| Distilled Spirits | 88.5\% | 61.9 | 5,479 | 93.3\% | 58.4 | 5,447 | 96.3\% | 82.1 | 7,902 | 90.3\% | 50.3 | 4,548 |
| Alcopops | 25.7\% | 5.0 | 128 | 22.6\% | 4.2 | 96 | 36.2\% | 4.6 | 166 | 17.8\% | 3.9 | 70 |
| Wine | 63.2\% | 13.2 | 836 | 80.1\% | 20.7 | 1,662 | 84.1\% | 20.3 | 1,705 | 77.2\% | 21.3 | 1,646 |
| Total | 89.7\% | 89.5 | 8,028 | 97.0\% | 87.9 | 8,526 | 98.0\% | 120.6 | 11,818 | 94.5\% | 77.4 | 7,320 |
| Sources: TNS Media Intelligence, 2001-2006; Mediamark Research \& Intelligence, 2001-2007. |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Sums of GRP columns may not match totals due to rounding. |  |  |  |  |  |  |  |  |  |  |  |  |

## ENDNOTES

1 J. Mullman, "Big brewers gut ad spend, sell more beer," Advertising Age, 24 September 2007, p. 1.
2 For the purposes of this report, "youth" are persons ages 12 to 20, "underage" refers to persons ages two to 20, "young adults" are persons ages 21 to 34, and "adults" are persons age 21 and above. Magazine audiences are not measured below age 12; television audiences are measured for ages two and above.
3 Youth are more likely to see on a per capita basis, or be "overexposed" to, a magazine or television advertisement for alcohol when it is placed in a magazine or on a program where the percentage of youth in the audience is greater than the percentage of youth in the general population. "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) is 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.
4 L.D. Johnston, P.M. O'Malley, J.G. Bachman and J.E. Schulenberg, Overall, illicit drug use by American teens continues gradual decline in 2007 (Ann Arbor, MI: University of Michigan News and Information Services, December 11, 2007), table 3. Available at http://www.monitoringthefuture.org/data/07data/pr07t3.pdf (accessed December 13, 2007).
5 Substance Abuse and Mental Health Services Administration, Results From the 2006 National Survey on Drug Use and Health: National Findings (Rockville, Md.: Office of Applied Studies, 2006). Available at http://www.oas.samhsa.gov/NSDUH/2k6NSDUH/2k6results.htm\#3.2 (accessed 21 November 2007). "Binge drinking" is defined as having five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days.
6 U.S. Department of Health and Human Services, Office of the Surgeon General, The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking (Washington, D.C.: U.S. Department of Health and Human Services, 2007).
7 A. Z. Fan, M. Russell, S. Stranges, J. Dorn, M. Trevisan, "Association of Lifetime Alcohol Drinking Trajectories with Cardiometabolic Risk," Journal of Clinical Endocrinology and Metabolism (2007). Available at http://jcem.endojournals.org/cgi/rapidpdf/jc.2007-1395v1 (accessed 20 November 2007).
8 U.S. Department of Health and Human Services, Office of the Surgeon General, The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking (Washington, D.C.: U.S. Department of Health and Human Services, 2007).
9 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. Farbakhsh, "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; 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.
10 H. Saffer, D. Dave, "Alcohol Advertising and Alcohol Consumption by Adolescents," Health Economics 15, no. 6 (2006): 617-637.
11 © 2007 Nielsen Media Research, Inc. Ratings and other data contained herein are the copyrighted property of Nielsen Media Research, Inc.
Unauthorized use of this copyrighted material is expressly prohibited. Violators may be subject to criminal and civil penalties under Federal Law (17 USC 101 et seq.). All Rights Reserved.
12 Currently, local cable advertising is not systematically tracked or reported. In a sample TNS report for local cable advertising, there were over 4,000 alcohol ad placements in the Boston market alone during the first seven months of 2007 for various brands of beer, spirits, alcopops and wine. Audience data is generally not available for ad placements bought on local cable systems.
13 U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Indexes, Inflation Calculator. Available at http://data.bls.gov/cgibin/cpicalc.pl (accessed 20 November 2007).
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 According to Mediamark Research \& Intelligence population estimates, in 2006 youth ages 12 to 20 were $15.44 \%$ of all persons age 12 and older. According to Nielsen Media Research estimates of the population in TV households, from January to August 2006, youth ages 12 to 20 were $15.39 \%$ of all persons age 12 and older, and from September through December 2006, youth ages 12 to 20 were $15.31 \%$ of all persons age 12 and older.
16 Federal Trade Commission, Self-regulation in the Alcohol Industry: A Review of Industry Efforts to Avoid Promoting Alcohol to Underage Consumers (Washington, D.C.: Federal Trade Commission, 1999).
17 Monitoring the Future, unpublished data provided to David H. Jernigan, PhD in e-mails from Lloyd Johnston, 25 January 2006 and from Ginger Maggio, 23 February 2006.
18 J. Roeber, D.L. Green, K.M. Meurer, J.J. Armitage, G.M. Maas, R.C. McClinton, K. Courtney, J.L. Cremeens, R.D. Brewer, J.W. Miller, D. Eaton, "Types of Alcoholic Beverages Usually Consumed by Students in 9th-12th Grades—Four States, 2005," Morbidity and Mortality Weekly Report 56, no. 29 (2007): 737-740.

19 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).
20 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), pp. 138-140.
21 Sober Truth on Preventing Underage Drinking Act (STOP Act), Public Law 109-422, 109th Cong., 2d sess. (20 December 2006).
22 Each book covers the market for the previous year. For 2003-2005, the category is defined as "low-proof refreshers (not over 7\% alcohol), primarily single-serve items." M. Shanken Communications, The U.S. Beer Market: Impact Databank Review and Forecast, 2002 ed. (New York: M. Shanken Communications, 2002); M. Shanken Communications, The U.S. Beer Market: Impact Databank Review and Forecast, 2003 ed. (New York: M. Shanken Communications, 2003); M. Shanken Communications, The U.S. Beer Market: Impact Databank Review and Forecast, 2004 ed. (New York: M. Shanken Communications, 2004).


[^0]:    Sources: TNS Media Intelligence, 2001-2006; Mediamark Research \& Intelligence, 2001-2007.
    Note: Sums of rows and columns may not match totals due to rounding.

[^1]:    Sources: Nielsen Media Research, 2001-2006; TNS Media Intelligence, 2001-2006; Mediamark Research \& Intelligence, 2001-2007.

[^2]:    Source: Nielsen Media Research, 10/16/06-10/22/06 (top national programs among teens ages 12-17, excluding specials).

