



# Forging the Link Between Alcohol Advertising and Underage Drinking

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Sales pitches for alcoholic beverages are everywhere: at the grocery store, in magazines, on television, and at concession stands. Kids can't avoid them, even though alcohol ads are supposedly aimed at adults. Researchers have long suspected a connection between alcohol advertisements and underage drinking, but positive correlations to date may have been due to other factors like peer and family influences that affect both drinking and ad exposure.

Researchers with the RAND Corporation have now made a much stronger connection, taking a new look at alcohol ads and youth drinking with studies designed to avoid the pitfalls of earlier ones. Furthermore, they tested to see if participation in a school-based drug prevention program can counteract the impact of alcohol ads.

Their key findings: For adolescents, exposure to alcohol ads is directly linked to subsequent drinking, but different kinds of ads have different influences depending on a youngster's prior alcohol use. Even in elementary school, kids recognize certain alcohol advertisements. School drug prevention programs can help blunt the impact of alcohol ads on youth.

## Key findings:

- Alcohol advertising appears to promote adolescent drinking.
- Different kinds of ads have different effects depending on a youngster's prior alcohol use.
- Children recognize certain alcohol advertisements at an early age.
- School drug prevention programs can blunt the impact of alcohol ads on youth.

## Alcohol Advertising Does Influence Youth Drinking

For two different studies, the RAND researchers analyzed data from thousands of Midwestern students participating in a large-scale field trial of drug prevention curricula known as Project ALERT (for middle schools) and ALERT Plus (for middle schools and high schools). The curricula were developed by the RAND Corporation.

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### This Highlight summarizes RAND Health research reported in the following publications:

Collins RL, Ellickson PL, McCaffrey DF, and Hambarsoomians K, Saturated in Beer: Awareness of Beer Advertising in Late Childhood and Adolescence, *Journal of Adolescent Health*, Vol. 37, No. 1, July 2005, pp. 29–36.

Ellickson PL, Collins RL, Hambarsoomians K, and McCaffrey DF, Does Alcohol Advertising Promote Adolescent Drinking? Results from a Longitudinal Assessment, *Addiction*, Vol. 100, No. 2, 2005, pp. 235–246.

The studies reported here focused on beer advertisements because beer ads are more pervasive than those for other kinds of alcohol and the ads are more likely to appear where young people might see them.

In the first study, adolescent health experts Phyllis Ellickson and Rebecca Collins tracked exposure to beer ads and subsequent drinking among more than 3,000 students as they moved from middle school to high school. Data for this study came from three different questionnaires the students filled out: a baseline drinking survey at the start of grade 7, a survey about alcohol advertising and TV viewing at the end of grade 8, and a survey about past-year drinking at the end of grade 9.

The study divided students into two groups:

- Initial nondrinkers: grade 7 students who said they had never tried alcohol, not even a sip (39 percent).
- Initial drinkers: grade 7 students who said they had already tried alcohol (61 percent).

The study examined four venues of beer advertising: magazines, concession stands, grocery/convenience stores, and TV (see the table). Students were asked how often in the past year they had read specific magazines and saw specific televised sports and late-night programs that account for a majority of TV alcohol ads seen by adolescents. These had been selected with input from student focus groups and advertising tracking data. Students were also shown photographs of typical beer displays at concession stands and in grocery stores and asked to estimate how often in the past year they had seen something similar.

### Findings

*Exposure to alcohol ads is directly linked to subsequent drinking in mid-adolescence.*

- Nearly half of the 7th grade nondrinkers became drinkers by 9th grade.
- More than three-quarters of the 7th grade initial drinkers had used alcohol during 9th grade.
- The more ads youth saw during 8th grade, the greater the likelihood they fell into one of these two groups of 9th grade drinkers.

*The ad effect is real.* It persisted after the researchers accounted for numerous other influences on youth drinking, for example, doing poorly in school or having peers who drink. “That, plus looking at changes in drinking over time, is what makes this study stronger than most of those done in the past,” said Ellickson.

### Venues for Beer Advertisements

Venue	Specific Source
Magazines	<i>Rolling Stone</i> <i>Sports Illustrated</i> <i>People</i> <i>Playboy</i> <i>Field and Stream</i> <i>Newsweek</i>
Concession stands	Photograph of typical concession stand at sports events and concerts
In-store displays	Photograph of typical display at supermarkets and convenience stores
Television	Televised football and basketball games <i>The Tonight Show with Jay Leno</i> <i>Late Night with Conan O’Brien</i> <i>The Late Show with David Letterman</i> <i>Saturday Night Live</i>

*Different kinds of ads have different influences on youth depending on a youngster’s prior alcohol use.*

- For initial *nondrinkers*, in-store beer displays had the most sway.
- For initial *drinkers*, ads in magazines and concession stand displays at sports and music events had the most influence.

“It appears that a combination of drinking experience and venue influences adolescent responses to advertising,” said Ellickson. “Advertising that links alcohol with everyday life, such as supermarket displays, appears to have more influence on drinking initiation. On the other hand, kids who are already drinkers appear to pay more attention to ads in more-sophisticated venues—at sports and music events or in magazines like *Playboy* and *Rolling Stone*.”

### School Drug Prevention Programs Can Dampen the Appeal of Alcohol Ads

The RAND researchers also found that a prevention curriculum that helps youth identify and resist alcohol marketing strategies can counteract the effect of some ads on adolescent drinking.

About half of the students in the advertising study were enrolled in ALERT Plus, an evidence-based drug prevention program that adds high school lessons to the original Project ALERT middle school program now used in all states. Lessons help students recognize different forms of alcohol marketing, identify persuasive appeals, and counter pressures to use alcohol, cigarettes, and marijuana. For example, students learn about product placement in venues like supermarkets and movies as well as how to rewrite advertising messages to tell the real truth about alcohol use.

The study found that students who took part in the ALERT Plus program were less likely than the control students to drink in 9th grade. Furthermore, the ALERT Plus students who hadn't started drinking before the lessons began were less susceptible to the persuasive appeals of in-store advertisements.

"This is the first time we have seen that a school drug prevention program like ALERT Plus can counteract the pro-drinking effect of at least some types of alcohol advertising," said Ellickson.

### Awareness of TV Ads Starts Early

In the study described above, the RAND researchers found some evidence that viewing beer ads on TV encourages the nondrinkers to start drinking. However, the link was not as strong as that for advertising in magazines, at concession stands, and with in-store displays. "It may be that the real effect of television advertising only shows up after repeated exposure over many years. And elementary school children may be more vulnerable to the persuasive appeals of TV ads than adolescents," according to the RAND researchers.

The possibility of a delayed effect of TV alcohol ads on youth drinking ties in with results from a second RAND study on alcohol advertising and its impact on youth. For this study, Collins and Ellickson assessed survey responses from fifteen hundred 9th grade students taking part in the ALERT Plus field test and two thousand 4th grade students from elementary schools in the same districts. The RAND team found that younger children watch a lot of TV and see lots of alcohol ads. In this study, 4th graders were exposed to an average of 376 TV beer ads over a seven-month period, while the older teenagers were exposed to 286. This difference reflected that the elementary school children watched nearly twice as many televised professional sports programs, where beer is heavily advertised, than did their teen counterparts.

One way to learn whether children actually pay attention to ads that they see on TV is to measure ad awareness or recognition. The RAND researchers did this, finding that kids recognize specific beer ads on TV at an early age, at least as young as age 9.

The researchers had asked the students to respond to a set of photographs from four TV beer commercials that aired frequently during the six months before the survey. The photographs were edited to remove any indication of the product and the brand. They included a youth-oriented nationally aired beer ad featuring an animated ferret and lizards, along with three other beer ads with more adult

appeal. For comparison, the researchers also showed students edited photographs from an ad for a product that is more appropriate for youth—a popular soft drink commercial featuring a young girl.

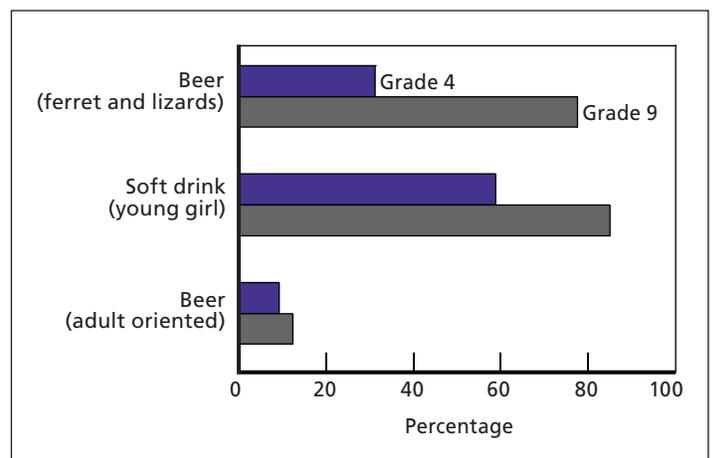
### Findings

- *Ad awareness.* Most students in both age groups reported seeing the animated ferret and lizards ad, a level of ad awareness that was not far behind that of the youth-marketed soft drink ad. In contrast, less than a quarter reported seeing the more adult-oriented beer ad, even though it was aired when comparatively more youth were watching TV.
- *Brand recognition.* Nearly 80 percent of 9th graders knew the ferret and lizards ad well enough to correctly name the brand of the beer. Even one in three of the 4th graders could also do so. More than half of the 4th graders and 85 percent of the 9th graders could name the brand of the soft drink ad. Only around 10 percent of both groups could name the brand of the more adult-oriented beer ad. (See the figure.)

The study also found that more than one in four 4th graders could name three or more brands of beer, and an equal number knew the slogan for at least one brand.

"While the younger children were less familiar with the TV beer ads, less interested in them, and liked them less, our results suggest there is cause for concern regarding this group," said Collins. "The average fourth grader knows a lot about beer ads and brands for someone ten years under the legal drinking age."

**Students Who Correctly Named the Brand in the Edited TV Ads**



## Policy Implications

The 2003 Institute of Medicine's report, *Reducing Underage Drinking: A Collective Responsibility*, estimates the social cost of underage drinking at \$53 billion, including \$19 billion from traffic accidents and \$29 billion from violent crime. Combating underage drinking involves multiple approaches. With regard to alcohol advertising, the RAND studies described in this Highlight raise the following issues for policymakers to consider:

### Alcohol Advertising Policy

- Alcohol advertising policy should take into consideration all ad venues to which adolescents are exposed, including magazines, TV, in-store displays, and concession stands at sports events and concerts.
- Given the high rates of beer advertising awareness among adolescents watching televised sports, the current practice of airing frequent beer ads during such programming warrants examination.

- Youth reactions to specific ads should be examined on a regular basis, by advertisers and by policymakers, so that ads particularly appealing to young people can be identified and pulled.

### Future Research

- Future research should focus on identifying ways to counter the impact of "special venue" advertising on youth who have already started drinking.
- More studies are needed to understand the impact of television advertising on underage drinking, specifically by targeting the possible cumulative effect of exposure to TV alcohol ads year after year.

### School Drug Prevention Programs

- Helping children become aware of and able to counter the multiple sources of alcohol advertising to which they are exposed should be an important component of school prevention programs. ■

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